# **Excelsior**

CA-010-088

#### EXCELSIOR WILDERNESS STUDY AREA (WSA)

(CA-010-088)

# 1. THE STUDY AREA ---

9,383 acres

The Excelsior WSA is located in east-central Mono County, approximately 24 miles northeast of Lee Vining, California. The WSA includes 9,383 acres of Bureau of Land Management (BLM) lands. There are neither State lands nor private inholdings in the WSA (see Map 1 and Table 1).

The northern boundary of the WSA follows a 60-kV powerline right-of-way northeast along State Highway 167, then follows the Toiyabe National Forest (USFS) boundary east to the Mono County line. The boundary proceeds southeast until it meets a 750-kV powerline right-of-way. The boundary then turns south along the Inyo National Forest boundary and around private land. The WSA boundary turns west at Deep Wells Road until it meets Dobie Meadows Road. The boundary follows this road northwest, skirting around a few private land portions, until it intersects the 60-kV powerline right-of-way along State Highway 167.

The WSA is located along the western edge of the Basin and Range geomorphic province and occupies the northeast corner of Mono Basin, a gentle southwest-sloping valley consisting of fill deposits from ancient Lake Russell. These surface fill deposits are composed of fine grained silt and sand with interbedded sand and gravel material. The landscape is uniform in character except for some small volcanic bluffs in the southeast corner of the WSA. As a result, the WSA terrain features are subdued and visually bland. Elevation ranges from 6,800 to 7,000 feet. The vegetation consists of Great Basin shrubs with some stands of pinyon pine and Utah juniper.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Various suitability recommendations were analyzed in the Draft and Final Environmental Impact Statements (EIS) for the Benton-Owens Valley/Bodie-Coleville Wilderness Study Areas. A summary of the area's wilderness values was included in the Final EIS. Two different suitability recommendations were analyzed in the EIS: all wilderness and no wilderness.

## 2. RECOMMENDATION AND RATIONALE ---

0 acres recommended for wilderness 9,383 BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. The all-wilderness alternative is considered to be the environmentally preferred alternative as it would result in the least change from the natural environment over the long term.

The no wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The WSA is recommended nonsuitable because its potential for mineral occurrence outweighs the area's marginal wilderness values. Within this WSA, wilderness values are considered low due to the lack of significant wilderness features or characteristics unique to the region. In addition, manageability was a consideration in the nonsuitable recommendation.

Solitude is somewhat affected visually by vehicle use occurring on State Highway 167 which lies along the WSA's north boundary. Additionally, the 750-KV electric transmission line in the northeast corner of the unit visually limits opportunities for solitude locally.

Resource conflicts in the WSA include moderate potential for geothermal resources. Some geothermal exploration has occurred within three miles of the WSA in the Mono-Long Valley Known Geothermal Resource Area.

The WSA reflects an environment that is bleak and visually monotonous. It portrays a topography and vegetation that is displayed throughout most of Mono Basin. The WSA's vegetative patterns, forms, and textures blend together into a monotonous landform cover. The pinyon-juniper associations provide some visual contrast. The lack of significant or unique wilderness values renders this WSA to a low level of wilderness quality. As a result, this WSA would provide little or no significant enhancement to the National Wilderness Preservation System (NWPS).

The WSA's relatively flat, broad topography renders it vulnerable to vehicle encroachment. The lack of natural barriers along the unit's boundaries would make it difficult to manage as wilderness. There are approximately four miles of routes of travel which will remain available for vehicular use.

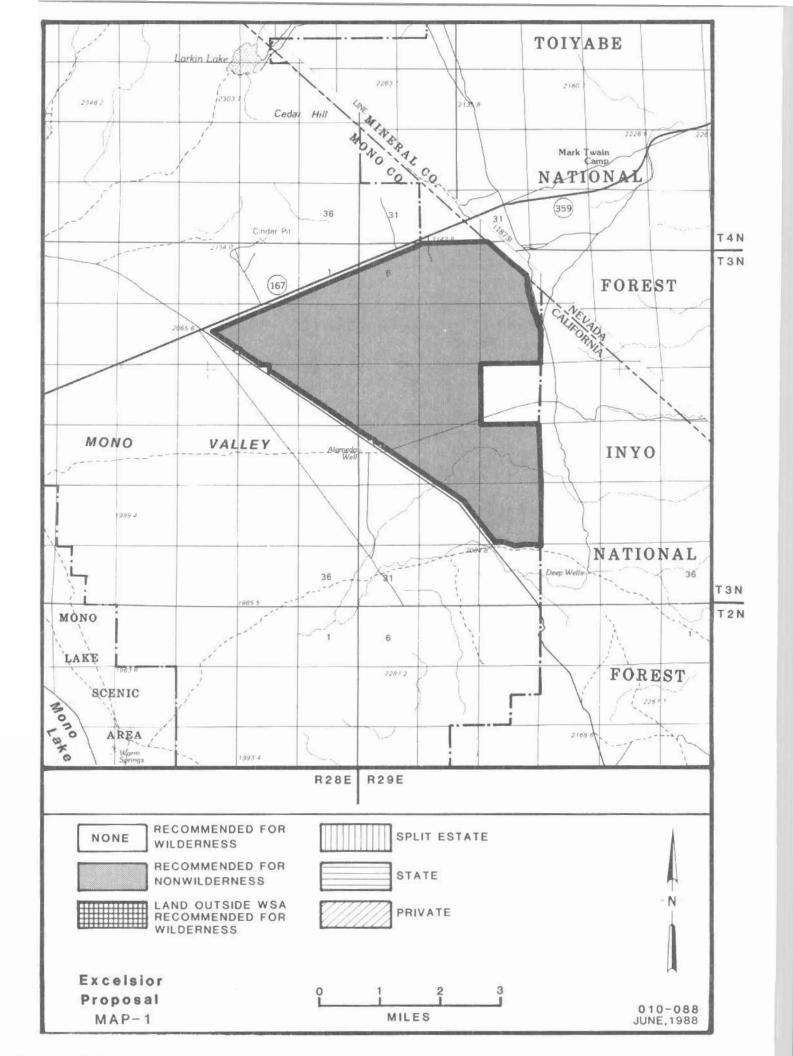


TABLE 1 - Land Status and Acreage Summary of the Study Area

BIM Split Estate	(surface and subsurface)	9,383 0
Inholdings State Private		0
Total		9,383
BIM BIM Split Estate Split Estate		Acres 0 0 0 0 0 0
Inholdings State Private		0
Within the Area Not BLM Split Estate	Recommended for Wilderness (surface and subsurface) (BIM surface only)	<u>Acres</u> 9,383 0
Total BIM	Land Not Recommended for Wilderness	9,383

## 3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

## A. Wilderness Characteristics

Naturalness: The natural character of the WSA has been relatively untouched by man. The WSA consists of very gently southwest-sloping valley fill deposits of ancient Lake Russell, a remnant of the Quaternary age. The terrain is generally uniform. Some small volcanic bluffs are located in the WSA's southeast corner. One-half of the WSA consists of big sagebrush-Indian ricegrass vegetation. In the northeast corner is a large juniper stand with a sagebrush understory.

In the southeast corner, two hills support stands of pinyon-juniper with understories of big sagebrush and bitterbrush. A few primitive vehicle routes totaling about four miles exist in the unit. These routes are unnoticeable in the WSA as a whole.

2. Solitude: The spaciousness and vegetative screening of the WSA combine together to provide area visitors with outstanding opportunities for solitude. State Highway 167 degrades these opportunities along the north boundary. The 750-KV electric transmission line near the northeast boundary also affects opportunities for solitude on a localized basis.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

- 3. <u>Primitive and unconfined recreation:</u> Opportunities for primitive and unconfined types of recreation include activities such as camping, hiking, hunting, horseback riding, etc. Scenic views of the eastern Sierra, Mono Lake, and the Bodie Hills are available from within the unit. No permanent water sources exist in the unit.
- 4. <u>Special features:</u> The major special feature this WSA contains is spring, summer, and fall habitat for pronghorn antelope. This habitat is a good ecological representation of Great Basin pronghorn antelope habitat.
- B. Diversity in the National Wilderness Preservation System (NWPS)
  - Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 8,069 acres of the Intermountain Sagebrush/Great Basin Sagebrush and 1,314 acres of the intermountain Sagebrush/Juniper-Pinyon Woodland ecosystem. The Excelsior WSA would not increase the diversity of the types of ecosystems represented in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification	NWPS	Areas	Other B	IM Studies
Domain/Province/PNV	areas	acres	areas	acres
	NATIONW	IDE		
Intermountain Sagebrush/ Great Basin Sagebrush Juniper-Pinyon Woodland	1 4	32,407 81,301	55 74	1,197,206 2,149,989
	CALIFOR	NIA		
Intermountain Sagebrush/ Great Basin Sagebrush Juniper-Pinyon Woodland	0	0 61,701	19 18	212,740 364,519

<sup>2.</sup> Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five hour drive of six major population centers. Table 3 summarizes the number and acreage of designated areas and other BIM study areas within a five-hour drive of the population centers.

Table 3 - Wilderness Opportunities for Residents of Major Population Centers

Population	NWPS Areas		Other BLM Studies	
Centers	areas	acres	areas	acres
California				
Fresno	35	4,048,852	28	460,7
Merced	33	3,957,550	25	348,7
Modesto	36	4,126,963	81	1,722,3
Sacramento	46	5,001,817	87	2,479,5
Stockton	35	4,061,833	46	601,4
Nevada				
Reno	39	4,647,230	170	6,904,8

<sup>3.</sup> Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of one BIM WSA recommended for wilderness designation. Yosemite National Park, administered by the National Park Service and the Hoover Wilderness, administered by the Toiyabe and the Inyo National Forests are located approximately 30 miles west of the WSA. These are the nearest designated wilderness areas. Other nearby designated wilderness areas include the Ansel Adams Wilderness which is managed by the Inyo National Forest.

# C. Manageability

The Excelsior WSA is manageable as wilderness, but with some difficulty. A lack of natural barriers along the WSA's boundary makes it vulnerable to indiscriminate OHV use. Frequent signing, fencing most of the border, and intensive patrolling would be required to insure the integrity of the unit. The gentle terrain and low vegetation are susceptible to four-wheel drive use and other types of off road vehicles.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

## D. Energy and Mineral Resource Values

 Summary of information known at the time of the preliminary suitability recommendation: The Excelsior WSA is within the BIM Mono Geology-Energy Minerals (G-E-M) Resource Area (GRA). The G-E-M data in the Affected Environment section of the 1987 BIM Wilderness Recommendations, Benton-Owens Valley/Bodie-Coleville Study Areas Final EIS, indicates that the WSA has a moderate potential for occurrence of geothermal resources. As of the spring of 1986, BIM records indicated that no unpatented mining claims were located within the WSA.

The G-E-M report for the Mono GRA does not specifically analyze the Excelsior WSA, however, it discusses the area in general terms. The WSA lies only three miles northeast of the Mono-Long Valley Known Geothermal Resource Area (KGRA). It is also entirely within the area classified as prospectively valuable for geothermal resources ("Lands Valuable for Geothermal Resources", USGS unpublished map revised July, 1985). Numerous springs occur in the area with temperatures of 36° C and 86° C. These temperatures are high enough for direct use applications. The area is the site of active volcanism. The presence of this magmatic heat source in combination with the highly faulted nature of the area (allowing migration of heated fluids) gives this area its moderate potential for geothermal resources using the BLM mineral resource classification scheme (see accompanying mineral potential map). A competitive geothermal lease sale was held on parcels within the KGRA in September, 1982. Bids were received, however, the amounts were nominal and the leases were not issued. No exploration activity was known to have occurred within the WSA.

The entire WSA was covered by oil and gas prospecting permits during the 1920s and 1930s but no leases were ever issued. A prospecting permit was issued for potassium in 1967.

 Summary of significant new mineral data collected since the suitability recommendation which should be considered in the final recommendation: Because the WSA was recommended nonsuitable by BLM, no U.S. Geological Survey (USGS) or U.S. Bureau of Mines (BOM) mineral surveys were conducted for this WSA. As of May, 1988, BLM records dated March 25, 1988, indicate no unpatented mining claims, mineral leases, or mineral material sale contracts/permits within the WSA. No new information concerning this WSA has been generated since May 4, 1988.

## E. <u>Impacts on Resources</u>

The following table summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness. (For a full explanation of this summary, refer to the Benton-Owens Valley/Bodie-Coleville Wilderness - Final Environmental Impact Statement.)

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Wilderness Values	On an overall basis there would be a minor impact on wilderness values within the 9,383-acre Excelsior WSA. Impacts in the western portion of the WSA from geothermal development would result in a direct loss of naturalness on up to 2,000 acres. Continued low levels of motorized recreation use, fuelwood harvesting and construction and maintenance of the livestock water development and the wildlife rain collection storage basin would result in negligible to minor local impacts. Opportunities for primitive and unconfined recreation would be limited in the WSA as a result of geothermal development and continued motorized recreation use. The pronghorn antelope habitat as a special feature of the WSA, would be limited on 40 acres due to geothermal development; however, it would benefit from the rain collection storage basin and the livestock water development.	Overall, the management actions under the All Wilder ness Alternative would result in a slight to minor enhancement of the longterm protection of wilderness values. Closure of the WSA to motorized recreation use, prohibition of geothermal exploration and eliminating fuelwood harvesting would result in minor benefits to wilderness values. Proposed wildlife improvements including maintenance would have slight adverse impacts on localized naturalness and solitude. There would be a slight benefit to the WSA's pronghorn antelope habitat.

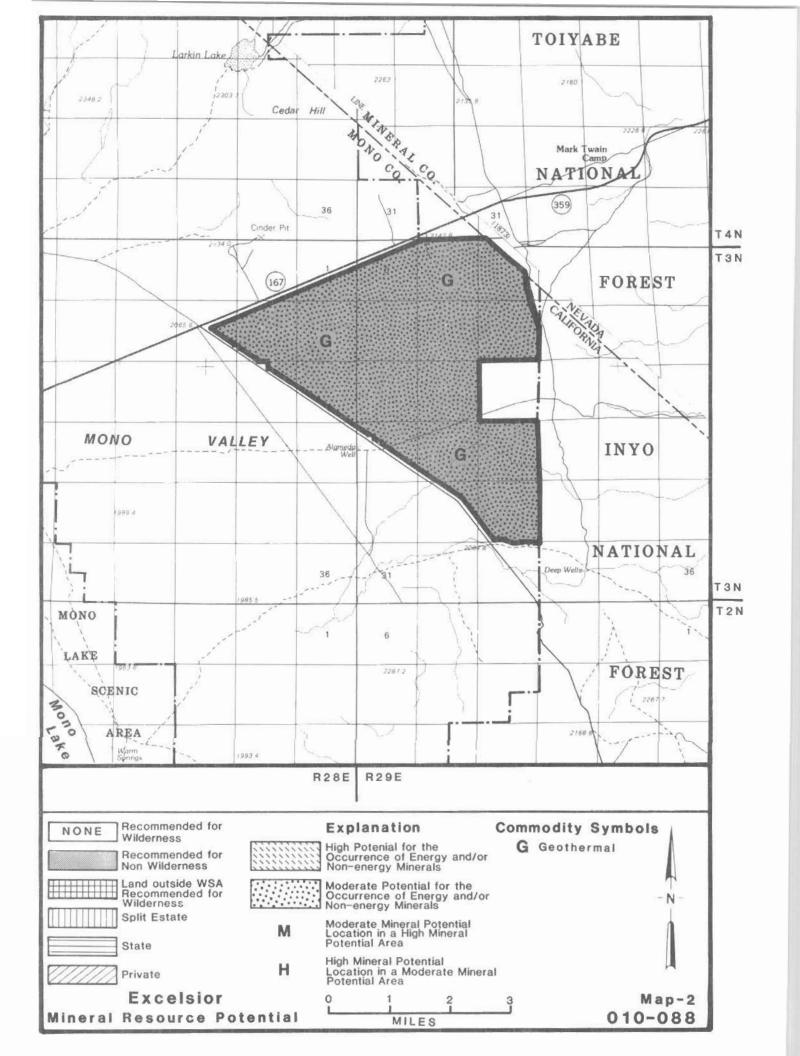


Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Motorized Recre- ation Use	There would be no impact on motorized recreation use which would remain at approximately the current annual level of 100 visitor days.	Motorized recreation use totaling 100 visitor days would be foregone within the WSA. While opportunities outside the WSA for motorized recreation use are somewhat limited, the low level of use being displaced from the WSA would be accommodated. There would be slight impacts on motorized recreation use.
Geothermal Resource Development	There would be no impact on geothermal exploration and development in the WSA.	Exploration and development of a projected 50-Mw geothermal resource would be foregone. Over the longterm, this would result in a less than minor impact.

## F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final EIS. Therefore, no further discussion of this topic will occur in this document.

## G. Summary of WSA - Specific Public Comments

During inventory, a few comments were received addressing the WSA's geothermal potential, and needs for powerline corridor expansion.

Comments were received during the wilderness study process. Two comments noted the influences of the eastern boundary transmission line on the WSA.

During the study, a public meeting and public hearing were held in association with the draft EIS. The public meeting was held in Markleeville, California, and the public hearing in Bishop, California. A total of 83 written and oral comments were received. Forty comments supported the Bureau's recommendation. Forty-three comments supported the all-wilderness alternative.

During the inventory, Mono County provided a comment pertaining to the area's wilderness values. No other agency comments were received.